

BRINGING IT ALL TOGETHER

CASE STUDY: KENT COUNTY

Kent County Road Commission's Experience in Asset Management

The majority of public roads in Michigan are under the jurisdiction of local governments. If the benefits of asset management are to be realized statewide, then it is imperative that the tools and procedures of asset management be utilized by local road agencies. Consequently, it is the intent of the Council to highlight agencies that are utilizing the principle of asset management in order to encourage other agencies to employ such methods.

The Kent County Road Commission's (KCRC) experience in asset management began in 1995 with an annual process of surveying pavement conditions on the primary road system for a new pavement management system. That effort significantly expanded the organization's ability to assess needs on a systems level and to forecast the impact of various investment alternatives. As a result, KCRC stepped up its investments in system preservation and the affect of that decision is illustrated on the accompanying chart.

In the mid-1990s, the trend in the condition of KCRC's primary road system was headed in the wrong direction. The miles of roads needing reconstruction were increasing per year while the roads considered needing only routine maintenance were declining. Leading up to that period, KCRC had completed many miles of expansion projects in response to a rapidly growing local economy and population. Annual surveys of road conditions, however, revealed the need to re-emphasize system preservation.

Since 1995, KCRC has more than doubled annual investments in its overlay and seal coat program. With the information generated by the pavement management system, KCRC has the ability to forecast the affect of its investment decisions. The accompanying chart demonstrates that ability and shows improving conditions on the primary road system due to increased investment in system preservation. This trend continues through 2008 with projects included in KCRC's current Five Year Improvement Program.

The Kent County Road Commission, in cooperation with the Grand Valley Metro Council (GVMC) transportation-planning program, adopted Micropaver as the area's official pavement management system. This program evaluates road segments according to a pavement condition index (PCI) which is used by GVMC to determine project eligibility for the Transportation Improvement Program (TIP). Various improvement types are associated with three PCI ranges.

<u>Improvement Need</u>	<u>PCI Range</u>
Routine Maintenance	71 – 100
Preservation	46 – 70
Resurface/Reconstruction	0 – 45

KCRC uses Micropaver to initially identify improvement projects and to evaluate different investment options. The Road Commission's philosophy is to insure that adequate investments are being made to preserve the primary road system as major expansion, construction, and reconstruction projects are considered.

To do so, a six-step planning process is followed each year as part of the annual budget cycle.

1. Survey Conditions: One-third of the roads on the primary road system are surveyed annually and the database is updated to reflect completed improvement projects.

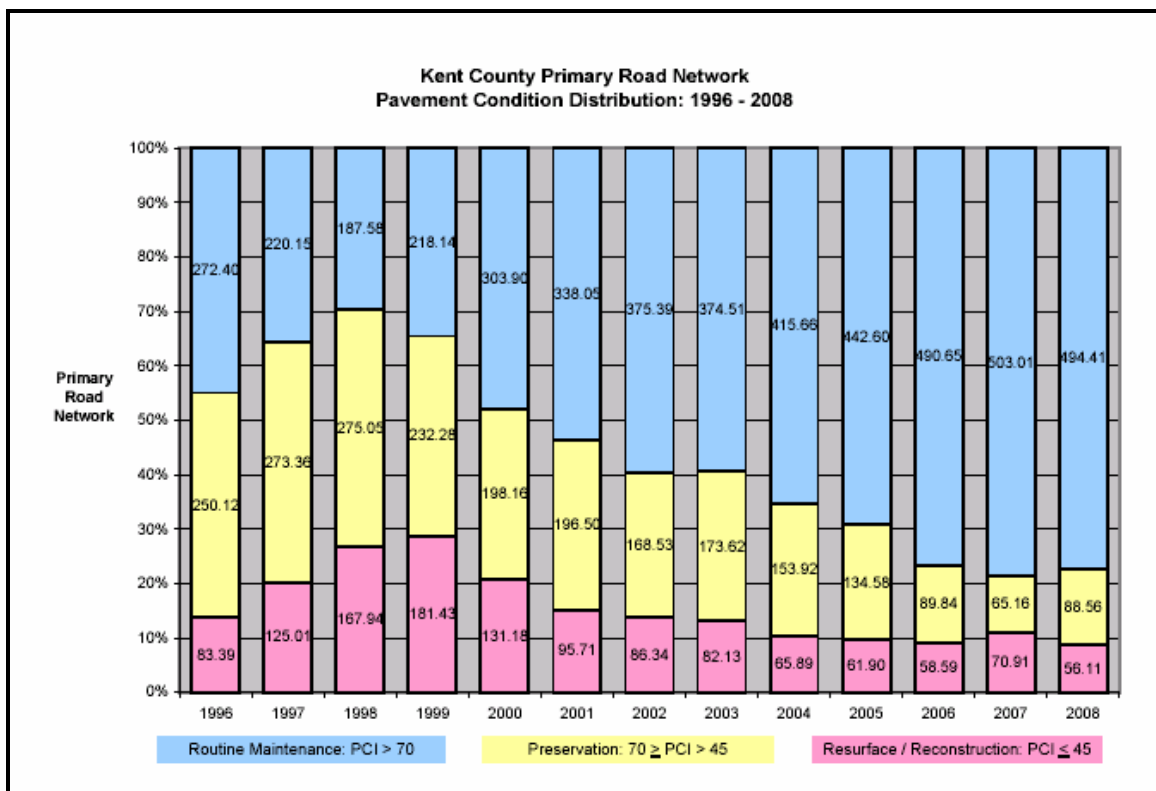
2. Determine Current Needs: A comprehensive list of primary road needs is produced annually using a variety of indicators including PCI, existing and projected traffic volume, and all-season condition.

3. Select and Package Projects: Staff from Planning, Engineering, and Maintenance review the needs list and cooperatively identify potential projects for the upcoming five-year period.

4. Analyze Future Conditions: Based upon the projects selected in Step 3, future conditions are forecast to determine if system performance objectives are being achieved.

5. Update Improvement Program: The Five-Year Improvement Program is updated as part of the process of developing the annual budget.

6. Monitor Performance: As projects are implemented, the condition of select segments are surveyed annually to more precisely determine the performance of various improvement strategies.



Asset management has become ingrained in the Kent County Road Commission's overall planning and annual budgeting processes. It is a fundamental process of systematically assessing the future of present decisions. With that in mind, it obviously

has application in many other functions in this, or any other organization. At this time, KCRC has completed condition surveys on the county's local road system is looking forward to other applications as well.

Any questions about Kent County Road Commission's experience in Asset Management may be directed to Steve Warren, KCRC Deputy Director, or Roger Belknap, Transportation Planner.